



UNITED STATES PATENT AND TRADEMARK OFFICE

SM

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
09/910,720	07/24/2001	James P. Hearn	8932-177	1799
20582	7590	10/04/2004		
JONES DAY 51 Louisiana Aveue, N.W WASHINGTON, DC 20001-2113				
EXAMINER RAMANA, ANURADHA				
ART UNIT		PAPER NUMBER		
3732				

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,720

Applicant(s)

HEARN ET AL.

Examiner

Anu Ramana

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 30, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 27, 29-46, 49-54, 58, 59, 64, 65, 67, 72, 73 and 75-87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 45, 46, 50-54, 58, 59, 64 and 65 is/are allowed.
- 6) ☒ Claim(s) 2, 3, 5-13, 15, 16, 27, 29-41, 43, 44, 67, 72, 73, 75, 76 and 81-87 is/are rejected.
- 7) ☒ Claim(s) 4, 14, 42 and 77-80 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: Attachment A

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 30, 2004 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 11, 15, 27, 29-36, 39-41, 43, 75 and 81-85, are rejected under 35 U.S.C. 102(e) as being anticipated by Herrington et al. (US 6,379,363).

Herrington et al. disclose a cranial clamp having a smooth base or first clamping member 12, a head 30 disposed proximate first clamping member with a bore, a stem or “integral extension member” or “tube” 16 placed in the bore of head 30, a smooth cap or second clamping member 14 and an “integrally formed stop member” or “crimp” or “ridge” or “twisted portion” or “proximal flared portion” 34 which limits the movement of clamping member 14 on extension member 16 (Figures 1 and 21e, col. 4, lines 4-67 and col. 5, lines 5-31).

Regarding claim 11, Herrington et al. also disclose second clamping member as having radial cutouts defining the protrusions 52 extending inwardly from an outer circumference of the clamping member 14 (col. 4, lines 59-64 and col. 5, lines 5-17). See Attachment A for Figure 1 marked up to show claim limitations.

Regarding claim 27, the first and second clamping members are “substantially smooth”, i.e., they do not have “teeth-like” features.

Regarding claims 35 and 83, opening 59 includes a countersink or an “enlarged opening” defined by the cutouts (Figures 1 and 3).

Regarding claims 40, 41 and 84, second clamping member 14 has a recessed area 38 proximate or “very near” circular opening 59 receiving stop 32 (Figure 1).

Regarding claim 75, the method by which an apparatus is made, “provided by mechanical deformation of the extension member” is not given any patentable weight in an apparatus claim (*In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972)).

Claims 2-3, 5-6, 8-9, 27, 29-34, 36, 39-41, 43, 67, 73 and 86-87 are rejected under 35 U.S.C. 102(b) as being anticipated by Lerch (US 5,800,436).

Lerch discloses a clamp having a first clamping member 21 with a substantially or “almost entirely” smooth concave inner surface, a second clamping member 22 with a substantially or “almost entirely” smooth concave inner surface and a shaft or “tube” or “integral extension member” 112 received in bore 211 of first clamping member 21; the extension member 112 having a head 111 to prevent the first clamping member 21 from sliding off the extension member (col. 1, lines 42-51, col. 2, lines 50-64 and Figure 1). Lerch further discloses a notch or “stop” or “proximal flared portion” or “crimp” 112c (col. 3, lines 34-43).

Regarding the limitation “wherein the second clamping member.....by a crimping force applied to the extension member adjacent the second clamping member,” Lerch discloses that a tool of the type employed to fasten blind rivets is used to secure the clamping members to the extension member (col. 3, lines 20-43). A tool employed to fasten blind rivets when utilized on extension member 112 inherently applies a crimping or “pinching” force.

Regarding claims 1 and 87, the method by which an apparatus is made, “provided by mechanical deformation of the extension member” is not given any patentable weight in an apparatus claim (*In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972)).

Regarding claim 40, Lerch discloses a recessed or concave area proximate or “surrounding” opening 221 (Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-13, 16, 37-38, 44 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrington et al.

Regarding claims 12, 37, 38 and 76, although Herrington et al. do not disclose that extension member 16 is a ribbon or a longitudinal member with a rectangular cross section, it would have been obvious to one of ordinary skill in the art to substitute a ribbon for the extension member wherein so doing would amount to mere substitution of one functionally equivalent structure for another within the same art, namely a structure capable of being sheared off against a suitable surface, and the selection of any of these structures would work equally well in the claimed device.

Regarding claim 13, second clamping member 14 of Herrington et al. has a recessed area 38 surrounding opening 59 that receives stop 32 (Figure 1).

Regarding claims 16 and 44, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a fastener hole in second clamping member for securing the clamping member since it is well known in the art to utilize fasteners for the purpose of securing one member to another.

Claims 7, 10, 35, 37-38, 44, 72 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lerch.

Regarding claim 7, Lerch discloses an enlarged portion or head 111 on the outside surface of first clamping member 21 to prevent member 21 from slipping off shaft 112. It is well known to provide an enlarged portion near the inner surface of a first clamping member to prevent movement of the first clamping member along a shaft, for e.g., Herrington et al. (Figure 1). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to have provided an enlarged portion near the inner surface of a first clamping member, since it was known in the art to provide an enlarged portion near the inner surface of a first clamping member to prevent movement of the first clamping member along a shaft.

Regarding claims 10 and 35, Lerch discloses that shaft 112 is trimmed off with a tool of the type employed to fasten blind rivets. Thus, shaft 112 is deformed to plug opening 221 in second clamping member 22 in the manner of a countersink, i.e., the trimmed shaft is flush with the upper surface of the second clamping member.

Regarding claims 37 and 76, although Lerch does not disclose that extension member 16 is a ribbon or a longitudinal member with a rectangular cross section, it would have been obvious to one of ordinary skill in the art to substitute a ribbon for the extension member wherein so doing would amount to mere substitution of one functionally equivalent structure for another within the same art, namely a structure capable of being sheared off against a suitable surface, and the selection of any of these structures would work equally well in the claimed device.

Regarding claims 44 and 72, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a fastener hole in second clamping member for securing the clamping member since it is well known in the art to utilize fasteners for the purpose of securing one member to another.

Response to Arguments

Applicant's arguments under "REMARKS" submitted in the response filed on August 30, 2004, with respect to independent claims 1, 2, 11, 27 and 45 have been considered. Applicant's arguments with respect to amended claims 1 and 45 are persuasive. Applicant's arguments with respect to claims 2, 11 and 27 have been considered but are not persuasive for the following reasons.

With regard to claim 2, a tool of a type used to fasten blind rivets inherently applies a crimping or "deforming" or "pinching" force when used on the extension member 112 wherein the notch or groove 112c acts as a crimping means. To support this position, the Examiner directs Applicants' attention to Auriol et al. (US 5,030,050, col. 5, lines 14-25).

With regard to claim 11, Herrington et al. disclose radial cutouts (see Attachment A for marked up Fig. 1 from Herrington et al.

With regard to claim 27, Herrington et al. do not disclose any "teeth" on the clamping members and thus the clamping members are held to be "substantially smooth." The term "substantially smooth" is understood to be the lack of teeth or similar features per Applicants' disclosure.

Allowable Subject Matter

The indicated allowability of claims 11 and all claims dependent thereon in the Advisory Action mailed on August 4, 2004 is withdrawn in view of the rejections made in this office action. The Examiner sincerely apologizes for any inconvenience caused to the Applicants by this action.

Claims 1, 45-46, 49, 50-54, 58-59 and 64-65 are allowed.

Claims 4, 14, 42 and 77-80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

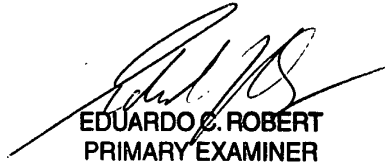
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (703) 306-4035. The examiner can normally be reached Monday through Friday between 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached at (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR *Anuradha Ramana*
September 27, 2004


EDUARDO C. ROBERT
PRIMARY EXAMINER

ATTACHMENT A

